Moving image coding method and moving image decoding method

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Cited documents:

JP10271507
JP10023423
XP002952897
XP002952898
XP002952899

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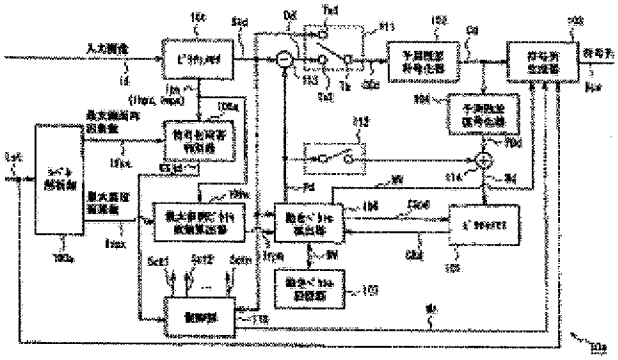
Abstract of **WO03065733**

A moving image coding device (10a) comprises a level analyzer (100a) that determines the maximum number of codable on-screen pixels (Nfpx) based on a level identifier (Lst) indicating a user-specified coding level and the maximum number of stored pixels (Nspx) that can be stored in the picture memory of a decoding device. Based on the maximum number of on-screen pixels (Nfpx) and an input image size (number of vertical pixels (Nhpx) and number of horizontal pixels (Nwpx)), the moving image coding device (10a) determines if an input image can be coded and, at the same time, calculates the maximum number of reference pictures (Nrpn) that is the number of reference candidate pictures that can be referenced during inter-picture predictive coding. A decoding device, which receives a code string from such a moving picture coding device (10a), can always decode the code string properly and can perform inter-picture predictive decoding corresponding to inter-picture predictive coding on the coding side. As a result, it is possible to design the memory area of a coding device and a decoding device compatible with a coding method that does not limit the capacity of the memory area.



Id...INPUT IMAGE
Ifpx...MAXIMUM NUMBER OF ON-SCREEN PIXELS
100a...LEVEL ANALYZER
Ispx...MAXIMUM NUMBER OF STORED PIXELS
101...PICTURE MEMORY
105a...CODING DETERMINATION UNIT
105a...MAX-NO-OF-REFERENCE-PICTURES CALCULATING UNIT
110...CONTROLLER
106...MOVING VECTOR DETECTOR
107...MOVING VECTOR STORAGE UNIT
102...PREDICTED RESIDUAL ERROR CODING DEVICE
104...PREDICTED RESIDUAL ERROR DECODING DEVICE
105...PICTURE MEMORY
103...CODING STRING GENERATOR
Bsa...CODING STRING